

Claims

[c1] What is claimed is:

1. An elastomer suspension system skateboard truck comprising

a. A hanger including a fundamental body with a semi-circular through-holed aperture yolk, single horizontally orientated axle, including threaded end portions which extend outward from the terminal ends of the hanger for means of attaching wheels, extending outwardly and perpendicular from the anterior dorsal surface of the fundamental body of the hanger is a pivoting stabilizer on which the hanger rotates to control and guide the hanger.

[c2] b. The base plate including two elevated elastomer shock absorbing mounting platforms which are bilateral and equidistant from the center line of the baseplate, where each elevated elastomer shock absorber mounting platform consists of a single raised cast conically shaped elastomer shock absorber mounting stud for the purpose of attaching and securing the elastomer shock absorbers to the base plate.

[c3] 2. The skateboard truck of claim 1, in which on the dor-

sal surface of the hanger bilateral and equidistant from the center line of the semicircular through-holed aperture neck of the hanger are single raised cast conically shaped shock absorber mounting studs central to the elastomer shock absorber circular recessed retention cutout, for the purpose of attaching and securing the elastomer shock absorbers to the hanger.

[c4] 3. The skateboard truck of claim 2, where the semicircular through-holed yolk, which is radial from and perpendicular to the hanger fundamental body, will accept a pivot pin and two constant rate elastomer bushings; one dorsal and one ventral to the semicircular through-holed aperture yolk for securing the hanger to the base plate where the hanger will rotate upon the pivot pin.

[c5] 4. The skateboard truck of claim 3, where the pivot pin will be inserted and rotated through the lower constant rate compression elastomer bushing retention washer, into the posterior portion of the ventral surface of the lower constant rate compression elastomer bushing, exiting through the anterior end of the lower constant rate compression elastomer and entering the posterior portion of the semicircular through-holed aperture yolk, exiting the anterior surface of the semicircular through-holed aperture yolk into the posterior portion of the ventral surface of the upper constant rate compression elas-

tomers bushing, exiting through the anterior portion of the upper constant rate elastomer bushing, passing through the upper constant rate compression elastomer bushing retention washer and terminating in the raised through-holed attachment socket, where a threaded hexagonal jam nut will be attached securing the pivotal junction.

- [c6] 5. The skateboard truck of claim 4, where central to the anterior portion of the ventral surface of the base plate will be a recessed interlocking socket consisting of a constant rate compression elastomer cup, where the pivoting stabilizer of the hanger will engage the base plate producing a terminal pivot joint, which will facilitate ease and stability of the rotation of the hanger assembly enhancing steering maneuverability, and in addition, absorb associated impact forces to the pivoting stabilizer.
- [c7] 6. The skateboard truck of claim 1, in which six through-holed apertures with two located in each corner of the posterior end of the base plate and two through-holed apertures in each corner of the anterior end of the base plate for securing the skateboard truck base plate and assembly to a skateboard deck.
- [c8] 7. The skateboard truck of claim 1, where constant rate compression elastomer shock absorbers of the suspen-

sion system, are cylindrically shaped along their vertical axis, being spherical in shape at the midpoint and open at either end with conically formed mounting orifices for inserting the constant rate compression elastomer shock absorber over the raised conically shaped elastomer shock absorber mounting studs located on both the hanger and base plate, and will be fabricated from various densities of elastomers. The shock absorbers are of such length and shape that when installed to the opposing shock mounting studs, the shocks are compressed slightly to produce a pre-load condition. This is for the purpose of a retaining method to keep the elastomer shock in position when separation of hangar and base occurs.

[c9] 8. The skateboard truck of claim 7, shall have the mounting orifice of one end of a constant rate compression elastomer shock absorber inserted over and mounted to the raised conically shaped shock absorber mounting stud that is situated on one of the elevated elastomer shock absorber mounting platforms of the base plate.

[c10] 9. The skateboard truck of claim 8, shall have the mounting orifice of one end of another constant rate compression elastomer shock absorber inserted over and mount to the laterally opposite raised conically shaped

elastomer shock absorber mounting stud that is situated on the opposite elevated elastomer shock absorber mounting platform of the base plate.

[c11] 10. The skateboard truck of claim 8, where the shock absorber mounting orifice of the opposite end of the constant rate compression elastomer shock absorber shall be inserted over and mounted to the raised conically shaped elastomer shock absorber mounting stud and secured in the circular recessed shock absorber retention cutout of the hanger.

[c12] 11. The skateboard truck of claim 9, where the opposite end of the other shock absorber's mounting orifice shall be inserted over and mounted to the laterally opposite raised conically shaped elastomer shock mounting stud and secured in the opposite circular recessed shock absorber retention cutout of the hanger.

[c13] 12. The skateboard truck of claim 1, where the axle terminal studs shall be tap threaded to appropriate size to accommodate the mounting standard skateboard wheels.